Appendix E

" Minimum Requirement" Analysis

PART A

Is it an emergency?

NO

Does the project conflict with stated wilderness goals?

NO

There is no conflict with the park's current Backcountry Management plan. A Suitability study for the Rosillos area was completed in 2003.

Are there other less intrusive actions that should be tried first? NO

Less intrusive actions are not technologically feasible at this time.

Can this project or activity be accomplished outside of wilderness and still achieve its objectives ? NO

Radio reception coverage plots illustrate that the levels of reception and coverage provided by a repeater site on Rosillos peak for the combined agencies involved are optimum on Rosillos peak over all other peaks of a similar or greater altitude within or outside the park boundary.

Is this project or activity subject to valid existing rights?

Is there a special provision in legislation that allows this project or activity? NO

PART B – Effects on Wilderness Character

How does the project or activity benefit the wilderness resource?

Experiences from other National Park Service areas located on the Mexican border illustrate the potential threat to Big Bend National Park wilderness areas from an increase in smuggling and undocumented alien traffic. Enhanced radio communications for all park employees and other partner agencies, will greatly aid in preventing degradation of wilderness areas resulting from illegal activities. Additionally, providing a radio system with repeaters in the best geographic locations to provide optimum coverage will lessen the chances of agencies requesting new sites in wilderness areas (i.e. re-establishment of the Sue Peak site) and the proliferation of telecommunications antennas intruding on the skyline at sites located just outside wilderness areas of the park.

If this project were not completed, what would be the beneficial and detrimental effects to the wilderness resource?

Benefits would include the absence of any man made intrusions on the summit of Rosillos Peak. The detrimental effects to wilderness resources come from the reduced communications abilities in the protection of wilderness values, public and employee health and safety. A good communications system for all agencies working together could present a huge deterrent to widespread damage to wilderness resources by closing off the park as a viable migration and drug trafficking route. The ability of any public agency to protect wilderness lands and values along the Mexican border has been severely challenged in the past decade. Efforts by the U.S. Border Patrol with Operation Hold the Line, Safeguard, Gatekeeper and others to stop illegal border crossing in and near cities and ports of entry all along the southern border successfully pushed immigration and drug traffic away from populated lands onto isolated private and public lands. As witnessed on all public lands in neighboring Arizona, the flood of illegal immigration and the increase in drug smuggling traffic has had devastating impacts on those lands set aside as wilderness. Studies have shown widespread impact to wilderness and protected areas. A

2002 NPS study of 330,000 acres managed as wilderness at Organ Pipe NM in Arizona documented lasting human impacts over all of the wilderness area except mountains too steep to traverse. National Park areas in Arizona have been forced to construct metal border fences fabricated from railroad track, dig trenches to ensnare vehicles attempting to drive cross country through wilderness and close large portions of land to the visiting public because of illegal drug and immigration traffic. Fragile desert water sources and springs may never recover from the effects of these impacts. Many cultural and natural features have been lost forever.

How would the proposed project or activity help to ensure that human presence is kept to a minimum, etc. ?

The proposed project is the minimum size needed to provide a radio repeater on the site. No permanent structures will be used, no digging, leveling or ground disturbance will occur. No roads, trails, or visible intrusions other than the repeater will be used. The site will be painted to camouflage the facility into the natural surroundings as well as possible.

How would the project or activity ensure that the wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation?

The project would protect the visitor experience throughout the nearly 534,000 acres of Big Bend National Park managed as proposed wilderness through enhanced visitor and resource protection to deter inappropriate activities and prevent unwanted intrusions and illegal activities. Currently, the radio repeater site on Emory Peak provides good to patchy coverage to most of this area. Areas in the shadow of Emory Peak, many areas to the southeast of Emory and the entire area north of the Rosillos mountains have little or no radio reception. The combination of the Rosillos and Emory repeater sites would provide strong signals over a larger percentage of wilderness lands and include new coverage of the suitable wilderness lands north of the Rosillos mountains. As cited above, the ability to use good communications as a deterrent to the use of the wilderness backcountry areas of Big Bend National Park as corridors for illegal immigration and drug smuggling will enhance the protection of wilderness resources.

Management Situation

What does your management plan, policy and legislation say to support proceeding with this project?

The NPS Wilderness Preservation and Management Policy 6.3.10.1 states Administrative Facilities (eg. radio repeater sites) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other appropriate planning documents.

The Backcountry Management Plan (1995) identifies the Rosillos peak area of the park as "Non-Wilderness Backcountry" and specifies that "the number and types of facilities to support (backcountry) visitor use ... will be limited to the minimum necessary to achieve the park's backcountry management objectives and to provide for health and safety of park visitors". The Backcountry Plan also states that "facilities such as radio antenna and repeater sites may be placed in recommended and potential wilderness only if they constitute the minimum facility required to carry out essential administrative functions and are specifically authorized by the Regional Director" Regarding the use of aircraft in the park's backcountry, the plan states "natural openings may be used for authorized non-emergency aircraft landings, but no site markings of improvements of any kind may be installed to support non-emergency aircraft use".

How did you consider wilderness values?

Wilderness values were considered second to life safety of park visitors, park employees and employees of cooperating agencies. There is no gain in convenience, comfort, political, economic or commercial values as a result of this project.

Alternative 1: Locate repeater site outside the park boundary

Find an alternate site on a peak outside the administrative boundary of the park. This would remove any impacts to park lands and prevent intrusion into lands managed as wilderness. This could be done as soon as a site was located. There are no peaks on lands outside the park that provide the radio signal coverage strength and area that the Rosillos peak site provides to all the agencies involved. All would lose portions of areas that a Rosillos peak facility would cover. If a site were located, leases and right of way arrangements would have to be made with private landowners. Biophysical effects would be eliminated from park lands and transferred to private lands. Wilderness experiences would not be harmed unless the site was visible from portions of the park. The ability to protect wilderness resources and values may be diminished by a communications system that does not provide optimum coverage. Political consequences include placement of another government facility on private lands and the associated security measures and concerns. Also to be considered are existing MOU's for combined communications with cooperating Federal agencies and our ability to continue to work together. Health and safety of the public and government employees would be compromised by the installation of a system that does not maximize the coverage and quality of radio communications. Costs and timing utilizing this alternative may be less than other alternatives if a site could be located. Once a lease or agreement for use of the site was in place, installation would be immediate. If a roadway exists to the site or if one could be put in, the expense of a helicopter to service a site would be eliminated.

Alternative 2 Status quo

Confine all radio facilities to Emory Peak – an area excluded from any wilderness designation as an administrative exclusion for the purpose of radio communications equipment. (see project proposal)

Alternative 3 Expand Emory Peak installation

Expand the facility atop Emory Peak. This may now include a need to close the summit to the public as a security measure if additional Department of Homeland Security or FBI radio equipment is needed at this site. Since 9/11, additional concerns have been raised concerning the security of communications sites and facilities. Emory Peak site is at the end of a public hiking trail and currently is accessible to thousands of visitors annually. New security standards may be mandated for continued use of the site. There will be additional impacts to the wilderness experience surrounding the summit of the peak through more visible and intrusive fencing, equipment or antennas. (see project proposal) Rosillos Peak by contrast, has no hiking trails to the summit and is inaccessible to the visiting public.

Alternative 4 Rosillos Peak

See project proposal and information contained elsewhere in EA.

For both Alternatives 3 and 4 there are both social and potential political effects. Alternative 3 would require adjustments in the visitor use and enjoyment of the summit of Emory Peak through limitation of areas people could access. Many wilderness users could be effected. Alternative 4 would have little or no impact on social or recreational values as only a handful of hikers have ever used the area.

Both Alternatives would likely involve some political debate and comment from groups such as the Wilderness Society and the Sierra Club. The Department of Homeland Security, law enforcement agencies with the State of Texas, the FBI and International Boundary and Water Commission all have vested interests in a communications site in Big Bend National Park. Existing and future MOU's will be effected by decisions made in this process.

The selection of any alternative that maintains the status quo or does not improve communications over the region and between cooperating agencies will have a negative overall effect on public health and safety by excluding radio coverage in those areas north of the Rosillos mountains, along road corridors, and shadow areas where coverage provided by Emory Peak is marginal and in those areas to the southeast of Emory peak that now lack adequate coverage. Additionally, if trends continue to mirror the experiences of National Parks in Arizona and elsewhere on the Mexican border, a lack of preparedness on the part of Big Bend National Park to meet those challenges could result in a negative impact to wilderness.

Preferred Alternative

Alternative 4 - Rosillos Peak

Specific operating requirements: In consultation with the archeologist and BCBP helicopter pilots a specific landing zone area will be identified for helicopter support of the facility. (Suggest ID of site in EA) Landings will be made in an area that will not impact cultural resources. Except for emergency operations, routine maintenance flights could be scheduled for times of the day and year to minimize the intrusion on wilderness values.

Maintenance requirements: A maximum number of 4 maintenance days per year would be required except for unscheduled emergency repairs.

Standards and design: The entire facility will be free standing, portable and classified temporary in nature. The facility can be removed by helicopter at any time should technology or needs change. The facility will require no digging or leveling of the ground and will be self-contained with the exception of the possible use of a grounding rod. All parts will be painted a color deemed suitable to blend into the natural surrounds to aid in concealing the facility. Antennas will be painted a sky blue to blend into the skyline.

Mitigation: See above. Mitigation of cultural resources will occur prior to installation.

Monitoring and Feedback: All mitigation will be documented and standards set will be maintained. Visibility impacts of the structure will be monitored and documented.